

Section 7.7 GASOLINE FUEL REID VAPOR PRESSURES

This section details how the Reid Vapor Pressures (RVP), in pounds per square inch, were determined for gasoline fuel sold in the 14 California air basins. The gasoline fuel RVP varies by geographic area, calendar year, month, and by months that result in winter carbon monoxide and summer ozone episodes.

7.7.1 Introduction

Variations in the fuel RVP effect the magnitude of hot soak, diurnal, resting loss and running loss emissions. The basic emission rates of these evaporative emission processes are adjusted according to the RVP of the fuel used. This adjustment is necessary to account for differences in RVP between the fuel used during laboratory testing, to that used on the road. In the MVEI7G model the fuel RVP varied by summer and winter months, as shown in Table 1, and other changes that coincided with the introduction of phase 1¹ and phase 2² fuels.

Table 7.7-1 Gasoline Fuel RVPs in MVEI7G

	Summer	Winter
Pre-1992	9.00	11.70
1992-96	7.80	10.00
>=1996	7.00	9.00

The wintertime RVP values also vary by calendar year, however, these values are calculated assuming that a similar reduction in the wintertime RVP would occur due to the introduction of phase 1 and phase 2 fuels. Additionally, these values do not reflect geographic variations in RVP, i.e., higher RVPs in colder regions to prevent cold starting problems and lower RVPs in the desert regions to prevent vapor lock. In EMFAC2000, the user can request an emissions estimate for any region of the state (to the county level) and month. This requires an RVP file that details the variation in RVP by region (air basin level), by calendar year (CY) and month.

7.7.2 Methodology

Staff contacted members of the Western States Petroleum Association (WSPA) to ascertain the regional, seasonal and historic variations in the RVP. In most cases, members of WSPA (local refineries) mentioned that they produce fuel that follows the American Society for Testing and Materials (ASTM) standard specification for automotive spark-ignition engine fuel (ASTM D 4814). The ASTM D 4814 defines six

¹ Phase 1 fuel with a maximum 7.8 psi RVP was sold during the regulatory periods as defined in Title 13, section 2251.5 of the California Code of Regulations. This fuel was sold during the regulatory periods after January 1, 1992 and before March 1, 1996.

² Phase 2 fuel with a maximum 7.0 psi RVP is sold during the regulatory periods as defined in Title 13, section 2262.1 of the CCR. This fuel was sold after March 1, 1996

volatility classes in terms of maximum RVP, and recommends which class should be used based on geographic area and month. For California, there are ASTM RVP specifications for four geographic areas: North Coast, South Coast, Southeast and Interior. These areas encompass the following counties:

- North Coast: Alameda, Contra Costa, Del Norte, Humbolt, Lake, Marin, Mendocino, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma and Trinity
- South Coast: Orange, San Diego, San Luis Obispo, Santa Barbara, Ventura, Los Angeles (except that portion north of the San Gabriel Mountain range and east of the Los Angeles county aqueduct)
- Southeast: Imperial, Riverside, San Bernardino, Los Angeles (that portion north of the San Gabriel mountain range and east of the Los Angeles county aqueduct), Mono, Inyo, Kern (that portion lying east of the Los Angeles county aqueduct)
- Interior: Lassen, Modoc, Plumas, Sierra, Siskiyou, Alpine, Amador, Butte, Calaveras, Colusa, El Dorado, Fresno, Glenn, Kern (except that portion lying east of Los Angeles county aqueduct), Kings, Madera, Mariposa, Merced, Placer, Sacramento, San Joaquin, Shasta, Sainlaus, Sutter, Tehama, Tulane, Tuolumne, Yolo, Yuba, Nevada

Staff received comments indicating that some of the refiners produce fuel up to the maximum allowable ASTM limits while others produced fuel that is less volatile but still met the ASTM guidelines. In addition to the ASTM RVP specifications, California regulates fuel RVP during the summer months. Sections 2251, 2251.5 and 2262.1 of Title 13 of the California Code of Regulations (CCR) specifies RVP limits, for each air basin, for calendar years prior to 1992, from 1992 to 1996, and 1996 and later, respectively. These regulations coincide with the introduction of 9.0, 7.8 and 7.0 pound RVP fuel. Please note the summer RVP control period also varies by air basin. Table 1 in Appendix 7.7-A shows the maximum allowable RVP specifications for each air basin and by calendar year. This table was created using the ASTM³ RVP guidelines and the CCR specifications for summertime RVP.

Additionally, staff obtained RVP data from two refineries that supply fuel for sale in the South Coast Air Basin (SCAB). The first data set contained RVP data from the 1975 through 1992 calendar years, while the other contained data for 1992 and later calendar years. Table 7.7-2 shows the combined RVP data from these two suppliers.

Two methodologies were used in estimating the actual RVPs for each air basin. The first technique involved calculating a ratio, for each month and calendar year, of the actual fuel RVP sold in SCAB (Table 7.7-2) to the ASTM/CCR RVP specification for fuel sold in SCAB (Table 1 of Appendix 7.7-A). These ratios (Table 7.7-3) were then applied to ASTM/CCR RVP specification for each air basin listed in Table 1 of Appendix 7.7-A to predict the actual RVPs. The problem with this method is that it leads to instances where

³ ASTM D 439-81 Standard Specifications For Automotive Gasoline
ASTM D 4814 -95b Standard Specification For Automotive Spark-Ignition Engine Fuel

the predicted RVP for March (1990 and later calendar years) is significantly less than that for April even though the ASTM/CCR RVP specifications for March are higher than that for April. For example, the ratios for March and April for 1990 are 0.68 and 0.97, respectively. If these ratios are applied to the months of March (RVP=12) and April (RVP=11), then the predicted RVPs for March and April are 7.11 and 10.64 RVP, respectively. The underlying reason for this discrepancy appears to be that in order to meet the summertime RVP specifications; refineries are producing fuel that meets these specifications at least one month ahead of schedule. This production schedule leads to smaller ratios for the month of March, indicating a larger difference between the actual RVP to that specified in the ASTM specifications.

The second method investigated involved developing a regression equation that can predict the fuel RVP given the ASTM/CCR RVP specification by month and calendar year. This regression equation (equation 7.7-1) was developed by comparing the actual RVP specifications to the ASTM/CCR RVP specifications for SCAB. Please note, for the purposes of this regression the months were converted to numeric values, i.e., Jan=1, Feb=2, etc., and the calendar years are represented according to their four digit numeric values.

Table 7.7-2 RVP data For Gasoline Fuel Sold In The South Coast Air Basin

	January	February	March	April	May	June	July	August	September	October	November	December
1975	11.3	11.7	8.6	9	9	9	8.8	9	8.9	8.8	10.7	11.6
1976	11.6	11.4	9.7	9	8.6	9	8.8	8.9	8.8	8.8	11	11.6
1977	11.3	10.4	9	9	8.8	8.8	8.8	9	8.8	8.6	10.7	12.3
1978	12.5	13	13.4	8.7	8.7	8.5	8.7	8.8	8.7	8.8	11.2	12.6
1979	13	11.1	8.2	8.5	8.5	8.7	8.6	8.8	8.7	8.6	11.3	11.4
1980	12.2	11.5	8.2	8.4	8.8	8.6	8.6	8.7	8.8	8.8	11.2	12.2
1981	12.2	8.3	8.8	8.8	8.5	8.8	8.8	8.75	8.7	8.5	11.4	12.6
1982	12.7	12.2	8.6	8.8	8.8	8.7	8.7	8.8	8.6	8.8	11.2	12.7
1983	13.2	10.6	8.8	8.9	8	8.7	8.8	8.7	8.8	8.8	11.4	13
1984	13	9.2	8.7	8.7	8.6	8.6	8.9	8.7	8.9	8.9	11.5	12.4
1985	13	12.5	8.7	8.5	8.7	8.8	8.7	8.7	8.7	8.8	11.5	12.4
1986	13	11.7	8.8	8.7	8.3	8.8	8.6	8.4	8.8	8.3	11.4	13
1987	11.2	8.8	8.5	8.5	8.9	8.8	8.9	8.7	8.8	8.7	11.2	11.5
1988	12.6	8.3	8.5	8.9	8.9	8.7	8.9	8.7	8.5	8.8	11	11.1
1989	12.7	11.2	8.5	8.7	8.4	8.3	8.1	8.4	8	8.2	11	11.1
1990	11.45	8.3	8.45	8.15	8.15	8.3	8.15	8.4	8.3	10.45	11.25	
1991	9.7	9.1	8.35	8.45	8.45	8.2	8.35	8.4	8.4	8.7	11.15	12.2
1992	11.2	7.35	7.35	7.35	7.35	7.4	7.25	7.25	7.3	7.5	11.6	12.2
1993	10.7	7.2	6.8	7.1	7.2	7.2	7.2	7.3	7.3	8.2	11.5	12.3
1994	10.5	7.4	7.4	7.4	7.5	7.5	7.5	7.6	7.5	7.6	11.2	11.3
1995	8.7	7.4	7.5	7.1	7	7	7	7.1	7.2	7.5	10.5	11.1
1996	10.4	7.6	6.9	6.8	6.8	6.8						

Table 7.7-3 Ratio of The Actual RVP to the ASTM/CCR RVP Specification For Fuel Sold in SCAB

	January	February	March	April	May	June	July	August	September	October	November	December
1975	0.84	0.87	0.69	0.78	0.78	0.84	0.88	0.90	0.89	0.82	0.93	0.86
1976	0.86	0.84	0.78	0.78	0.75	0.84	0.88	0.89	0.88	0.82	0.96	0.86
1977	0.84	0.77	0.72	0.78	0.77	0.82	0.88	0.90	0.88	0.80	0.93	0.91
1978	0.93	0.96	1.07	0.76	0.76	0.79	0.87	0.88	0.87	0.82	0.97	0.93
1979	0.96	0.82	0.66	0.74	0.74	0.81	0.86	0.88	0.87	0.80	0.98	0.84
1980	0.90	0.85	0.66	0.73	0.77	0.80	0.86	0.87	0.88	0.82	0.97	0.90
1981	0.90	0.61	0.70	0.77	0.74	0.98	0.98	0.97	0.97	0.94	0.91	0.93
1982	0.94	0.90	0.69	0.98	0.98	0.97	0.97	0.98	0.96	0.98	0.90	0.94
1983	0.98	0.79	0.70	0.99	0.89	0.97	0.98	0.97	0.98	0.98	0.91	0.96
1984	0.96	0.68	0.70	0.97	0.96	0.96	0.99	0.97	0.99	0.99	0.92	0.92
1985	0.96	0.93	0.70	0.94	0.97	0.98	0.97	0.97	0.97	0.98	0.92	0.92
1986	0.96	0.87	0.70	0.97	0.92	0.98	0.96	0.93	0.98	0.92	0.91	0.96
1987	0.83	0.65	0.68	0.94	0.99	0.98	0.99	0.97	0.98	0.97	0.90	0.85
1988	0.93	0.61	0.68	0.99	0.99	0.97	0.99	0.97	0.94	0.98	0.88	0.82
1989	0.94	0.83	0.68	0.97	0.93	0.92	0.90	0.93	0.89	0.91	0.88	0.82
1990	0.85	0.61	0.68	0.91	0.91	0.91	0.92	0.91	0.93	0.92	0.84	0.83
1991	0.72	0.67	0.67	0.94	0.94	0.91	0.93	0.93	0.93	0.97	0.89	0.90
1992	0.83	0.54	0.94	0.94	0.94	0.95	0.93	0.93	0.94	0.96	0.93	0.90
1993	0.79	0.53	0.87	0.91	0.92	0.92	0.92	0.94	0.94	1.05	0.92	0.91
1994	0.78	0.55	0.95	0.95	0.96	0.96	0.96	0.97	0.96	0.97	0.90	0.84
1995	0.64	0.55	0.96	0.91	0.90	0.90	0.90	0.91	0.92	0.96	0.84	0.82
1996+	0.77	0.56	0.99	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.84	0.82

$$\text{Actual RVP} = -29.538*S1 + 0.490*S2 + 125.014*S3 + 0.083*M2 - 0.069*Y1 - 0.997*M1 \quad (7.7-1)$$

Where:

$$\begin{aligned} S1 &= \text{RVP} & S2 &= \text{RVP}^2 & S3 &= \text{SQRT(RVP)} \\ M1 &= \text{Month} & M2 &= \text{Month}^2 & Y1 &= \text{Calendar Year} \end{aligned}$$

Table 7.7-4 shows the predicted RVP for SCAB using the regression equation above. Table 7.7-5 shows the difference between the actual RVP sold in SCAB (Table 7.7-2) and the predicted RVP (Table 7.7-4). Figure 7.7-1 shows the comparison of the actual and predicted RVPs for fuel sold in SCAB for calendar years 1975 and 1994.

Table 7.7-5 shows that the regression equation predicts higher RVPs during the month of February. This is also the month where the difference between the ASTM RVP specs

and the actual RVP produced is the highest. Table 2 in Appendix 7.7-A shows the predicted RVPs (except for SCAB), using equation 1, for various air basins in California. The RVPs in the months of July and December are also used to represent the RVPs during summer ozone and winter carbon monoxide episodes, respectively. Further, the annual average inventory is calculated using an RVP value that is based on the average of the monthly RVPs.

Figure 7.7-1 Comparison of the Actual and Predicted RVPs in SCAB

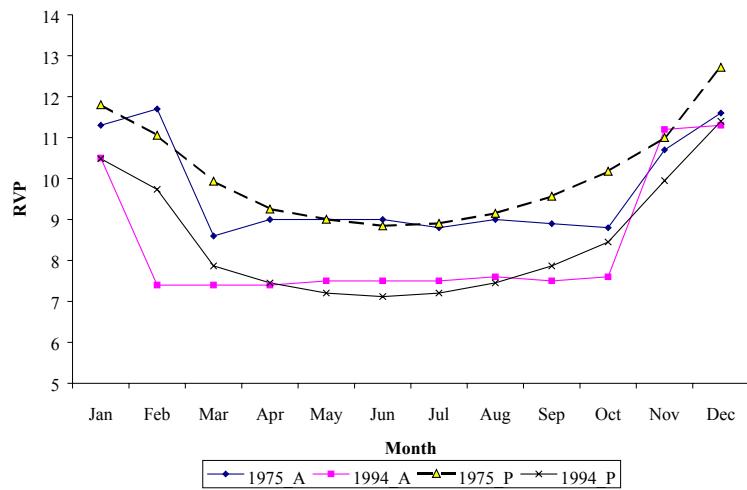


Table 7.7-4 Predicted RVP For SCAB Using Equation 7.7-1

	January	February	March	April	May	June	July	August	September	October	November	December
1975	11.80	11.06	9.94	9.26	9.01	8.85	8.90	9.15	9.57	10.18	11.00	12.72
1976	11.73	10.99	9.87	9.19	8.94	8.78	8.83	9.08	9.50	10.11	10.93	12.65
1977	11.66	10.92	9.80	9.12	8.87	8.71	8.77	9.01	9.43	10.04	10.86	12.58
1978	11.60	10.85	9.73	9.05	8.80	8.64	8.70	8.95	9.36	9.97	10.79	12.51
1979	11.53	10.78	9.66	8.98	8.73	8.57	8.63	8.88	9.29	9.90	10.72	12.44
1980	11.46	10.71	9.59	8.91	8.66	8.50	8.56	8.81	9.22	9.83	10.65	12.37
1981	11.39	10.64	9.52	8.84	8.59	8.35	8.43	8.68	9.10	9.68	10.85	12.30
1982	11.32	10.57	9.45	8.61	8.36	8.28	8.36	8.61	9.03	9.61	10.78	12.23
1983	11.25	10.50	9.38	8.54	8.29	8.21	8.29	8.54	8.96	9.54	10.71	12.16
1984	11.18	10.43	9.31	8.47	8.22	8.14	8.22	8.47	8.89	9.47	10.64	12.09
1985	11.11	10.36	9.24	8.40	8.15	8.07	8.15	8.40	8.82	9.40	10.57	12.02
1986	11.04	10.29	9.17	8.33	8.08	8.00	8.08	8.33	8.75	9.33	10.50	11.95
1987	10.97	10.22	9.10	8.26	8.02	7.93	8.02	8.26	8.68	9.26	10.43	11.88
1988	10.90	10.15	9.04	8.20	7.95	7.86	7.95	8.20	8.61	9.19	10.36	11.82
1989	10.83	10.08	8.97	8.13	7.88	7.79	7.88	8.13	8.54	9.12	10.30	11.75
1990	10.76	10.01	8.90	8.06	7.81	7.72	7.81	8.06	8.47	9.05	10.23	11.68
1991	10.69	9.95	8.83	7.99	7.74	7.65	7.74	7.99	8.40	8.98	10.16	11.61
1992	10.62	9.88	8.01	7.59	7.34	7.26	7.34	7.59	8.01	8.59	10.09	11.54
1993	10.55	9.81	7.94	7.52	7.27	7.19	7.27	7.52	7.94	8.52	10.02	11.47
1994	10.48	9.74	7.87	7.45	7.20	7.12	7.20	7.45	7.87	8.45	9.95	11.40
1995	10.42	9.67	7.80	7.38	7.13	7.05	7.13	7.38	7.80	8.38	9.88	11.33
1996	10.35	9.60	7.17	6.76	6.51	6.42	6.51	6.76	7.17	7.75	9.81	11.26

Table 7.7-5 The Difference Between The Actual Minus The Predicted RVPs For SCAB

	January	February	March	April	May	June	July	August	September	October	November	December
1975	-0.50	0.64	-1.34	-0.26	-0.01	0.15	-0.10	-0.15	-0.67	-1.38	-0.30	-1.12
1976	-0.13	0.41	-0.17	-0.19	-0.34	0.22	-0.03	-0.18	-0.70	-1.31	0.07	-1.05
1977	-0.36	-0.52	-0.80	-0.12	-0.07	0.09	0.03	-0.01	-0.63	-1.44	-0.16	-0.28
1978	0.90	2.15	3.67	-0.35	-0.10	-0.14	0.00	-0.15	-0.66	-1.17	0.41	0.09
1979	1.47	0.32	-1.46	-0.48	-0.23	0.13	-0.03	-0.08	-0.59	-1.30	0.58	-1.04
1980	0.74	0.79	-1.39	-0.51	0.14	0.10	0.04	-0.11	-0.42	-1.03	0.55	-0.17
1981	0.81	-2.34	-0.72	-0.04	-0.09	0.45	0.37	0.07	-0.40	-1.18	0.55	0.30
1982	1.38	1.63	-0.85	0.19	0.44	0.42	0.34	0.19	-0.43	-0.81	0.42	0.47
1983	1.95	0.10	-0.58	0.36	-0.29	0.49	0.51	0.16	-0.16	-0.74	0.69	0.84
1984	1.82	-1.23	-0.61	0.23	0.38	0.46	0.68	0.23	0.01	-0.57	0.86	0.31
1985	1.89	2.14	-0.54	0.10	0.55	0.73	0.55	0.30	-0.12	-0.60	0.93	0.38
1986	1.96	1.41	-0.37	0.37	0.22	0.80	0.52	0.07	0.05	-1.03	0.90	1.05
1987	0.23	-1.42	-0.60	0.24	0.88	0.87	0.88	0.44	0.12	-0.56	0.77	-0.38
1988	1.70	-1.85	-0.54	0.70	0.95	0.84	0.95	0.50	-0.11	-0.39	0.64	-0.72
1989	1.87	1.12	-0.47	0.57	0.52	0.51	0.22	0.27	-0.54	-0.92	0.70	-0.65
1990	0.69	-1.71	-0.45	0.09	0.34	0.43	0.49	0.09	-0.07	-0.75	0.22	-0.43
1991	-0.99	-0.85	-0.48	0.46	0.71	0.55	0.61	0.41	0.00	-0.28	0.99	0.59
1992	0.58	-2.53	-0.66	-0.24	0.01	0.14	-0.09	-0.34	-0.71	-1.09	1.51	0.66
1993	0.15	-2.61	-1.14	-0.42	-0.07	0.01	-0.07	-0.22	-0.64	-0.32	1.48	0.83
1994	0.02	-2.34	-0.47	-0.05	0.30	0.38	0.30	0.15	-0.37	-0.85	1.25	-0.10
1995	-1.72	-2.27	-0.30	-0.28	-0.13	-0.05	-0.13	-0.28	-0.60	-0.88	0.62	-0.23
1996	0.05	-2.00	-0.27	0.04	0.29	0.38	0.29	0.04	-0.37	-0.95	0.69	-0.16

7.7.3 Discussion

There are two main uncertainties in predicting RVPs for various air basins:

- The lack of actual RVP data from all the fuel suppliers in SCAB. Staff received data from only two of the six major fuel suppliers in SCAB. Additionally, the data from both refiners did not cover the same calendar year, resulting in RVP data that is representative of the RVP from a particular refinery. In talking to the refiners, staff ascertained that some refiners produce RVP that closely met the ASTM specifications while others produced fuel that easily met the same specifications. This variation should be accounted for in creating table 7.7-2. This would subsequently lead to better predictions of RVP for SCAB.
- The lack of actual RVP data from fuel suppliers to the North Coast or the interior regions of California.

Staff recommends that the RVPs shown Table 2 of Appendix 7.7-A should be used in EMFAC2000 to show the variation in RVPs by geographic areas, month and calendar years. This table also contains the actual RVP for fuel sold in SCAB and predicted RVPs for other regions of the state. The predicted RVPs, for other air basins, closely follow the ASTM and CCR RVP specifications; however, it may not adequately represent the early introduction low RVP fuel in summertime.

Appendix 7.7-A

Table 1 Maximum Allowable ASTM RVP Specifications

**South Coast
Air Basin**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1976	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1977	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1978	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1979	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1980	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1981	13.5	13.5	12.5	11.5	11.5	9	9	9	9	9	9	12.5
1982	13.5	13.5	12.5	9	9	9	9	9	9	9	9	12.5
1983	13.5	13.5	12.5	9	9	9	9	9	9	9	9	12.5
1984	13.5	13.5	12.5	9	9	9	9	9	9	9	9	12.5
1985	13.5	13.5	12.5	9	9	9	9	9	9	9	9	12.5
1986	13.5	13.5	12.5	9	9	9	9	9	9	9	9	12.5
1987	13.5	13.5	12.5	9	9	9	9	9	9	9	9	12.5
1988	13.5	13.5	12.5	9	9	9	9	9	9	9	9	12.5
1989	13.5	13.5	12.5	9	9	9	9	9	9	9	9	12.5
1990	13.5	13.5	12.5	9	9	9	9	9	9	9	9	12.5
1991	13.5	13.5	12.5	9	9	9	9	9	9	9	9	12.5
1992	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5
1993	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5
1994	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5
1995	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5
1996+	13.5	13.5	7	7	7	7	7	7	7	7	7	12.5

**Southeast
Desert Air
Basin**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1976	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1977	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1978	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1979	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1980	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5

Great Basin Valley air basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1976	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1977	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1978	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1979	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1980	12.5	11.5	10.75	10	9.5	9	9	9	9	9.5	10.75	12.5
1981	12.5	11.5	10.75	10	9	9	9	9	9	9.5	10.75	12.5
1982	13.5	12.5	10.75	9.5	9	9	9	9	9	9.5	10.75	12.5
1983	13.5	12.5	10.75	9.5	9	9	9	9	9	9.5	10.75	12.5
1984	13.5	12.5	10.75	9.5	9	9	9	9	9	9.5	10.75	12.5
1985	13.5	12.5	10.75	9.5	9	9	9	9	9	9.5	10.75	12.5
1986	13.5	12.5	10.75	9.5	9	9	9	9	9	9.5	10.75	12.5
1987	13.5	12.5	10.75	9.5	9	9	9	9	9	9.5	10.75	12.5
1988	13.5	12.5	10.75	9.5	9	9	9	9	9	9.5	10.75	12.5
1989	13.5	12.5	10.75	9.5	9	9	9	9	9	9.5	10.75	12.5
1990	13.5	12.5	10.75	9.5	9	9	9	9	9	9.5	10.75	12.5
1991	13.5	12.5	10.75	9.5	9	9	9	9	9	9.5	10.75	12.5
1992	13.5	12.5	10.75	7.8	7.8	7.8	7.8	7.8	7.8	9.5	10.75	12.5
1993	13.5	12.5	10.75	7.8	7.8	7.8	7.8	7.8	7.8	9.5	10.75	12.5
1994	13.5	12.5	10.75	7.8	7.8	7.8	7.8	7.8	7.8	9.5	10.75	12.5
1995	13.5	12.5	10.75	7.8	7.8	7.8	7.8	7.8	7.8	9.5	10.75	12.5
1996 +	13.5	12.5	10.75	7	7	7	7	7	7	9.5	10.75	12.5

San Francisco Air Basin

All Basins	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1976	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1977	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1978	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1979	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1980	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1981	13.5	13.5	13.5	12.5	11.5	9	9	9	9	9	12.5	14.25
1982	14.25	13.5	13.5	11.25	9	9	9	9	9	9	12.5	14.25

1983	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1984	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1985	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1986	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1987	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1988	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1989	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1990	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1991	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1992	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1993	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1994	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1995	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1996 +	14.25	13.5	13.5	7	7	7	7	7	7	7	7	12.5	14.25

San Diego Air
Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1975	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5	
1976	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5	
1977	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5	
1978	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5	
1979	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5	
1980	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5	
1981	13.5	13.5	12.5	11.5	11.5	9	9	9	9	9	9	12.5	13.5
1982	13.5	13.5	12.5	10.25	9	9	9	9	9	9	9	12.5	13.5
1983	13.5	13.5	12.5	10.25	9	9	9	9	9	9	9	12.5	13.5
1984	13.5	13.5	12.5	10.25	9	9	9	9	9	9	9	12.5	13.5
1985	13.5	13.5	12.5	10.25	9	9	9	9	9	9	9	12.5	13.5
1986	13.5	13.5	12.5	10.25	9	9	9	9	9	9	9	12.5	13.5
1987	13.5	13.5	12.5	10.25	9	9	9	9	9	9	9	12.5	13.5
1988	13.5	13.5	12.5	10.25	9	9	9	9	9	9	9	12.5	13.5
1989	13.5	13.5	12.5	10.25	9	9	9	9	9	9	9	12.5	13.5
1990	13.5	13.5	12.5	10.25	9	9	9	9	9	9	9	12.5	13.5
1991	13.5	13.5	12.5	10.25	9	9	9	9	9	9	9	12.5	13.5
1992	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	13.5
1993	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	13.5
1994	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	13.5
1995	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	13.5
1996 +	13.5	13.5	7	7	7	7	7	7	7	7	7	12.5	13.5

Sacramento Valley Air
Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1975	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1976	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1977	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1978	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1979	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1980	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1981	13.5	13.5	12.5	11.5	10.75	9	9	9	9	9	9	12.5	14.25
1982	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1983	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1984	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1985	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25

1986	14.25	13.5	13.5	11.25	9	9	9	9	9	9	12.5	14.25
1987	14.25	13.5	13.5	11.25	9	9	9	9	9	9	12.5	14.25
1988	14.25	13.5	13.5	11.25	9	9	9	9	9	9	12.5	14.25
1989	14.25	13.5	13.5	11.25	9	9	9	9	9	9	12.5	14.25
1990	14.25	13.5	13.5	11.25	9	9	9	9	9	9	12.5	14.25
1991	14.25	13.5	13.5	11.25	9	9	9	9	9	9	12.5	14.25
1992	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1993	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1994	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1995	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1996 +	14.25	13.5	13.5	7	7	7	7	7	7	7	12.5	14.25

San Joaquin Air Basin

Mountain Counties Air Basin

1989	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1990	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1991	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1992	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1993	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1994	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1995	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1996 +	14.25	13.5	13.5	7	7	7	7	7	7	7	7	12.5	14.25

Lake Tahoe

Air Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1975	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1976	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1977	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1978	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1979	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1980	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10.75	12.5	13.5	
1981	13.5	13.5	12.5	11.5	10.75	9	9	9	9	9	9	12.5	14.25
1982	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1983	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1984	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1985	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1986	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1987	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1988	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1989	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1990	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1991	14.25	13.5	13.5	11.25	9	9	9	9	9	9	9	12.5	14.25
1992	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1993	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1994	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1995	14.25	13.5	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1996 +	14.25	13.5	13.5	7	7	7	7	7	7	7	7	12.5	14.25

North Coast

Air Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1975	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1976	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1977	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1978	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1979	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1980	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1981	13.5	13.5	13.5	12.5	11.5	9	9	9	9	9	10.75	12.5	14.25
1982	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1983	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1984	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1985	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1986	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1987	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1988	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1989	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1990	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1991	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25

1992	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25
1993	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25
1994	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25
1995	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25
1996 +	14.25	13.5	13.5	11.25	7	7	7	7	7	10.75	12.5	14.25

Lake County
Air Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1975	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1976	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1977	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1978	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1979	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1980	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5	
1981	13.5	13.5	13.5	12.5	11.5	9	9	9	9	9	10.75	12.5	14.25
1982	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1983	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1984	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1985	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1986	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1987	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1988	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1989	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1990	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1991	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	10.75	12.5	14.25
1992	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25	
1993	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25	
1994	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25	
1995	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25	
1996 +	14.25	13.5	13.5	11.25	7	7	7	7	7	10.75	12.5	14.25	

North East Plateau Air
Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1975	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10	10.75	12.5	13.5
1976	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10	10.75	12.5	13.5
1977	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10	10.75	12.5	13.5
1978	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10	10.75	12.5	13.5
1979	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10	10.75	12.5	13.5
1980	13.5	13.5	12.5	11.5	10.75	10	10	10	10	10	10.75	12.5	13.5
1981	13.5	13.5	12.5	11.5	10.75	9	9	9	9	9.25	10.75	12.5	14.25
1982	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9.25	10.75	12.5	14.25
1983	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9.25	10.75	12.5	14.25
1984	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9.25	10.75	12.5	14.25
1985	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9.25	10.75	12.5	14.25
1986	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9.25	10.75	12.5	14.25
1987	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9.25	10.75	12.5	14.25
1988	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9.25	10.75	12.5	14.25
1989	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9.25	10.75	12.5	14.25
1990	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9.25	10.75	12.5	14.25
1991	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9.25	10.75	12.5	14.25
1992	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25	
1993	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25	
1994	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25	

1995	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	10.75	12.5	14.25
1996 +	14.25	13.5	13.5	11.25	7	7	7	7	7	10.75	12.5	14.25

North Central Coast
Air Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1976	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1977	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1978	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1979	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1980	13.5	13.5	13.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	12.5	13.5
1981	13.5	13.5	13.5	12.5	11.5	9	9	9	9	9	12.5	14.25
1982	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	12.5	14.25
1983	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	12.5	14.25
1984	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	12.5	14.25
1985	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	12.5	14.25
1986	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	12.5	14.25
1987	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	12.5	14.25
1988	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	12.5	14.25
1989	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	12.5	14.25
1990	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	12.5	14.25
1991	14.25	13.5	13.5	11.25	10.25	9	9	9	9	9	12.5	14.25
1992	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1993	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1994	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1995	14.25	13.5	13.5	11.25	7.8	7.8	7.8	7.8	7.8	7.8	12.5	14.25
1996 +	14.25	13.5	13.5	11.25	7	7	7	7	7	7	12.5	14.25

South Central Coast
Air Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1976	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1977	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1978	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1979	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1980	13.5	13.5	12.5	11.5	11.5	10.75	10	10	10	10.75	11.5	13.5
1981	13.5	13.5	12.5	11.5	11.5	9	9	9	9	9	12.5	13.5
1982	13.5	13.5	12.5	10.25	9	9	9	9	9	9	12.5	13.5
1983	13.5	13.5	12.5	10.25	9	9	9	9	9	9	12.5	13.5
1984	13.5	13.5	12.5	10.25	9	9	9	9	9	9	12.5	13.5
1985	13.5	13.5	12.5	10.25	9	9	9	9	9	9	12.5	13.5
1986	13.5	13.5	12.5	10.25	9	9	9	9	9	9	12.5	13.5
1987	13.5	13.5	12.5	10.25	9	9	9	9	9	9	12.5	13.5
1988	13.5	13.5	12.5	10.25	9	9	9	9	9	9	12.5	13.5
1989	13.5	13.5	12.5	10.25	9	9	9	9	9	9	12.5	13.5
1990	13.5	13.5	12.5	10.25	9	9	9	9	9	9	12.5	13.5
1991	13.5	13.5	12.5	10.25	9	9	9	9	9	9	12.5	13.5
1992	13.5	13.5	12.5	10.25	7.8	7.8	7.8	7.8	7.8	7.8	12.5	13.5
1993	13.5	13.5	12.5	10.25	7.8	7.8	7.8	7.8	7.8	7.8	12.5	13.5
1994	13.5	13.5	12.5	10.25	7.8	7.8	7.8	7.8	7.8	7.8	12.5	13.5
1995	13.5	13.5	12.5	10.25	7.8	7.8	7.8	7.8	7.8	7.8	12.5	13.5
1996 +	13.5	13.5	12.5	10.25	7	7	7	7	7	7	12.5	13.5

Table 2 Predicted RVPs by Air Basin

South Coast Air Basin-
actual RVPs

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.3	11.7	8.6	9.0	9.0	9.0	8.8	9.0	8.9	8.8	10.7	11.6
1976	11.6	11.4	9.7	9.0	8.6	9.0	8.8	8.9	8.8	8.8	11.0	11.6
1977	11.3	10.4	9.0	9.0	8.8	8.8	8.8	9.0	8.8	8.6	10.7	12.3
1978	12.5	13.0	13.4	8.7	8.7	8.5	8.7	8.8	8.7	8.8	11.2	12.6
1979	13.0	11.1	8.2	8.5	8.5	8.7	8.6	8.8	8.7	8.6	11.3	11.4
1980	12.2	11.5	8.2	8.4	8.8	8.6	8.6	8.7	8.8	8.8	11.2	12.2
1981	12.2	8.3	8.8	8.8	8.5	8.8	8.8	8.8	8.7	8.5	11.4	12.6
1982	12.7	12.2	8.6	8.8	8.8	8.7	8.7	8.8	8.6	8.8	11.2	12.7
1983	13.2	10.6	8.8	8.9	8.0	8.7	8.8	8.7	8.8	8.8	11.4	13.0
1984	13.0	9.2	8.7	8.7	8.6	8.6	8.9	8.7	8.9	8.9	11.5	12.4
1985	13.0	12.5	8.7	8.5	8.7	8.8	8.7	8.7	8.7	8.8	11.5	12.4
1986	13.0	11.7	8.8	8.7	8.3	8.8	8.6	8.4	8.8	8.3	11.4	13.0
1987	11.2	8.8	8.5	8.5	8.9	8.8	8.9	8.7	8.8	8.7	11.2	11.5
1988	12.6	8.3	8.5	8.9	8.9	8.7	8.9	8.7	8.5	8.8	11.0	11.1
1989	12.7	11.2	8.5	8.7	8.4	8.3	8.1	8.4	8.0	8.2	11.0	11.1
1990	11.5	8.3	8.5	8.2	8.2	8.2	8.3	8.2	8.4	8.3	10.5	11.3
1991	9.7	9.1	8.4	8.5	8.5	8.2	8.4	8.4	8.4	8.7	11.2	12.2
1992	11.2	7.4	7.4	7.4	7.4	7.4	7.3	7.3	7.3	7.5	11.6	12.2
1993	10.7	7.2	6.8	7.1	7.2	7.2	7.2	7.3	7.3	8.2	11.5	12.3
1994	10.5	7.4	7.4	7.4	7.5	7.5	7.5	7.6	7.5	7.6	11.2	11.3
1995	8.7	7.4	7.5	7.1	7.0	7.0	7.0	7.1	7.2	7.5	10.5	11.1
1996+	10.4	7.6	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	10.5	11.1

Southeast
Desert Air
Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.3	10.3	9.6	9.2	8.9	8.8	8.8	9.1	9.5	10.1	10.9	12.2
1976	11.2	10.2	9.5	9.1	8.8	8.7	8.8	9.0	9.4	10.1	10.9	12.1
1977	11.1	10.1	9.5	9.0	8.7	8.6	8.7	9.0	9.4	10.0	10.8	12.0
1978	11.1	10.0	9.4	8.9	8.7	8.6	8.6	8.9	9.3	9.9	10.7	12.0
1979	11.0	10.0	9.3	8.9	8.6	8.5	8.6	8.8	9.2	9.9	10.6	11.9
1980	10.9	9.9	9.2	8.8	8.5	8.4	8.5	8.8	9.2	9.8	10.6	11.8
1981	10.9	9.8	9.2	8.7	8.4	8.3	8.4	8.7	9.1	9.7	10.5	11.8
1982	11.3	10.0	9.1	8.6	8.4	8.3	8.4	8.6	9.0	9.6	10.4	11.7

1983	11.2	10.0	9.0	8.5	8.3	8.2	8.3	8.5	9.0	9.5	10.4	11.6
1984	11.2	9.9	9.0	8.5	8.2	8.1	8.2	8.5	8.9	9.5	10.3	11.6
1985	11.1	9.8	8.9	8.4	8.2	8.1	8.2	8.4	8.8	9.4	10.2	11.5
1986	11.0	9.8	8.8	8.3	8.1	8.0	8.1	8.3	8.7	9.3	10.2	11.4
1987	11.0	9.7	8.8	8.3	8.0	7.9	8.0	8.3	8.7	9.3	10.1	11.3
1988	10.9	9.6	8.7	8.2	7.9	7.9	7.9	8.2	8.6	9.2	10.0	11.3
1989	10.8	9.5	8.6	8.1	7.9	7.8	7.9	8.1	8.5	9.1	10.0	11.2
1990	10.8	9.5	8.6	8.1	7.8	7.7	7.8	8.1	8.5	9.1	9.9	11.1
1991	10.7	9.4	8.5	8.0	7.7	7.7	7.7	8.0	8.4	9.0	9.8	11.1
1992	10.6	9.3	8.0	7.6	7.3	7.3	7.3	7.6	8.0	8.6	9.7	11.0
1993	10.6	9.3	7.9	7.5	7.3	7.2	7.3	7.5	7.9	8.5	9.7	10.9
1994	10.5	9.2	7.9	7.5	7.2	7.1	7.2	7.5	7.9	8.4	9.6	10.9
1995	10.4	9.1	7.8	7.4	7.1	7.1	7.1	7.4	7.8	8.4	9.5	10.8
1996+	10.3	9.1	7.2	6.8	6.5	6.4	6.5	6.8	7.2	7.8	9.5	10.7

Great Basin
Valley Air
Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.3	10.3	9.6	9.2	8.9	8.8	8.8	9.1	9.5	10.1	10.9	12.2
1976	11.2	10.2	9.5	9.1	8.8	8.7	8.8	9.0	9.4	10.1	10.9	12.1
1977	11.1	10.1	9.5	9.0	8.7	8.6	8.7	9.0	9.4	10.0	10.8	12.0
1978	11.1	10.0	9.4	8.9	8.7	8.6	8.6	8.9	9.3	9.9	10.7	12.0
1979	11.0	10.0	9.3	8.9	8.6	8.5	8.6	8.8	9.2	9.9	10.6	11.9
1980	10.9	9.9	9.2	8.8	8.5	8.4	8.5	8.8	9.2	9.8	10.6	11.8
1981	10.9	9.8	9.2	8.7	8.4	8.3	8.4	8.7	9.1	9.7	10.5	11.8
1982	11.3	10.0	9.1	8.7	8.4	8.3	8.4	8.6	9.0	9.6	10.4	11.7
1983	11.2	10.0	9.0	8.6	8.3	8.2	8.3	8.5	9.0	9.6	10.4	11.6
1984	11.2	9.9	9.0	8.5	8.2	8.1	8.2	8.5	8.9	9.5	10.3	11.6
1985	11.1	9.8	8.9	8.4	8.2	8.1	8.2	8.4	8.8	9.4	10.2	11.5
1986	11.0	9.8	8.8	8.4	8.1	8.0	8.1	8.3	8.7	9.4	10.2	11.4
1987	11.0	9.7	8.8	8.3	8.0	7.9	8.0	8.3	8.7	9.3	10.1	11.3
1988	10.9	9.6	8.7	8.2	7.9	7.9	7.9	8.2	8.6	9.2	10.0	11.3
1989	10.8	9.5	8.6	8.2	7.9	7.8	7.9	8.1	8.5	9.2	10.0	11.2
1990	10.8	9.5	8.6	8.1	7.8	7.7	7.8	8.1	8.5	9.1	9.9	11.1
1991	10.7	9.4	8.5	8.0	7.7	7.7	7.7	8.0	8.4	9.0	9.8	11.1
1992	10.6	9.3	8.4	7.6	7.3	7.3	7.3	7.6	8.0	9.0	9.7	11.0
1993	10.6	9.3	8.3	7.5	7.3	7.2	7.3	7.5	7.9	8.9	9.7	10.9
1994	10.5	9.2	8.3	7.5	7.2	7.1	7.2	7.5	7.9	8.8	9.6	10.9
1995	10.4	9.1	8.2	7.4	7.1	7.1	7.1	7.4	7.8	8.7	9.5	10.8
1996 +	10.3	9.1	8.1	6.8	6.5	6.4	6.5	6.8	7.2	8.7	9.5	10.7

San Francisco
Air Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.8	11.1	10.5	9.5	9.0	8.9	9.0	9.3	9.7	10.3	11.3	12.7
1976	11.7	11.0	10.4	9.5	8.9	8.9	8.9	9.2	9.6	10.2	11.2	12.6
1977	11.7	10.9	10.3	9.4	8.9	8.8	8.9	9.1	9.5	10.1	11.1	12.6
1978	11.6	10.8	10.3	9.3	8.8	8.7	8.8	9.0	9.5	10.0	11.1	12.5
1979	11.5	10.8	10.2	9.2	8.7	8.6	8.7	9.0	9.4	10.0	11.0	12.4
1980	11.5	10.7	10.1	9.2	8.7	8.6	8.7	8.9	9.3	9.9	10.9	12.4
1981	11.4	10.6	10.1	9.1	8.6	8.3	8.4	8.7	9.1	9.7	10.9	12.9
1982	11.9	10.6	10.0	8.7	8.4	8.3	8.4	8.6	9.0	9.6	10.8	12.9
1983	11.9	10.5	9.9	8.7	8.3	8.2	8.3	8.5	9.0	9.5	10.7	12.8
1984	11.8	10.4	9.8	8.6	8.2	8.1	8.2	8.5	8.9	9.5	10.6	12.7

1985	11.7	10.4	9.8	8.5	8.2	8.1	8.2	8.4	8.8	9.4	10.6	12.7
1986	11.7	10.3	9.7	8.5	8.1	8.0	8.1	8.3	8.7	9.3	10.5	12.6
1987	11.6	10.2	9.6	8.4	8.0	7.9	8.0	8.3	8.7	9.3	10.4	12.5
1988	11.5	10.2	9.6	8.3	7.9	7.9	7.9	8.2	8.6	9.2	10.4	12.4
1989	11.5	10.1	9.5	8.3	7.9	7.8	7.9	8.1	8.5	9.1	10.3	12.4
1990	11.4	10.0	9.4	8.2	7.8	7.7	7.8	8.1	8.5	9.1	10.2	12.3
1991	11.3	9.9	9.4	8.1	7.7	7.7	7.7	8.0	8.4	9.0	10.2	12.2
1992	11.3	9.9	9.3	7.6	7.3	7.3	7.3	7.6	8.0	8.6	10.1	12.2
1993	11.2	9.8	9.2	7.5	7.3	7.2	7.3	7.5	7.9	8.5	10.0	12.1
1994	11.1	9.7	9.2	7.5	7.2	7.1	7.2	7.5	7.9	8.4	9.9	12.0
1995	11.0	9.7	9.1	7.4	7.1	7.1	7.1	7.4	7.8	8.4	9.9	12.0
1996 +	11.0	9.6	9.0	6.8	6.5	6.4	6.5	6.8	7.2	7.8	9.8	11.9

San Diego Air
Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.8	11.1	9.9	9.3	9.0	8.8	8.9	9.2	9.6	10.2	11.0	12.7
1976	11.7	11.0	9.9	9.2	8.9	8.8	8.8	9.1	9.5	10.1	10.9	12.6
1977	11.7	10.9	9.8	9.1	8.9	8.7	8.8	9.0	9.4	10.0	10.9	12.6
1978	11.6	10.8	9.7	9.0	8.8	8.6	8.7	8.9	9.4	10.0	10.8	12.5
1979	11.5	10.8	9.7	9.0	8.7	8.6	8.6	8.9	9.3	9.9	10.7	12.4
1980	11.5	10.7	9.6	8.9	8.7	8.5	8.6	8.8	9.2	9.8	10.7	12.4
1981	11.4	10.6	9.5	8.8	8.6	8.3	8.4	8.7	9.1	9.7	10.9	12.3
1982	11.3	10.6	9.5	8.7	8.4	8.3	8.4	8.6	9.0	9.6	10.8	12.2
1983	11.2	10.5	9.4	8.6	8.3	8.2	8.3	8.5	9.0	9.5	10.7	12.2
1984	11.2	10.4	9.3	8.5	8.2	8.1	8.2	8.5	8.9	9.5	10.6	12.1
1985	11.1	10.4	9.2	8.5	8.2	8.1	8.2	8.4	8.8	9.4	10.6	12.0
1986	11.0	10.3	9.2	8.4	8.1	8.0	8.1	8.3	8.7	9.3	10.5	12.0
1987	11.0	10.2	9.1	8.3	8.0	7.9	8.0	8.3	8.7	9.3	10.4	11.9
1988	10.9	10.2	9.0	8.3	7.9	7.9	7.9	8.2	8.6	9.2	10.4	11.8
1989	10.8	10.1	9.0	8.2	7.9	7.8	7.9	8.1	8.5	9.1	10.3	11.7
1990	10.8	10.0	8.9	8.1	7.8	7.7	7.8	8.1	8.5	9.1	10.2	11.7
1991	10.7	9.9	8.8	8.0	7.7	7.7	7.7	8.0	8.4	9.0	10.2	11.6
1992	10.6	9.9	8.0	7.6	7.3	7.3	7.3	7.6	8.0	8.6	10.1	11.5
1993	10.6	9.8	7.9	7.5	7.3	7.2	7.3	7.5	7.9	8.5	10.0	11.5
1994	10.5	9.7	7.9	7.5	7.2	7.1	7.2	7.5	7.9	8.4	9.9	11.4
1995	10.4	9.7	7.8	7.4	7.1	7.1	7.1	7.4	7.8	8.4	9.9	11.3
1996+	10.3	9.6	7.2	6.8	6.5	6.4	6.5	6.8	7.2	7.8	9.8	11.3

Sacramento Valley Air
Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.8	11.1	9.9	9.3	8.9	8.8	8.9	9.2	9.6	10.2	11.3	12.7
1976	11.7	11.0	9.9	9.2	8.9	8.8	8.8	9.1	9.5	10.1	11.2	12.6
1977	11.7	10.9	9.8	9.1	8.8	8.7	8.8	9.0	9.4	10.0	11.1	12.6
1978	11.6	10.8	9.7	9.0	8.7	8.6	8.7	8.9	9.4	10.0	11.1	12.5
1979	11.5	10.8	9.7	9.0	8.7	8.5	8.6	8.9	9.3	9.9	11.0	12.4
1980	11.5	10.7	9.6	8.9	8.6	8.5	8.6	8.8	9.2	9.8	10.9	12.4
1981	11.4	10.6	9.5	8.8	8.5	8.3	8.4	8.7	9.1	9.7	10.9	12.9
1982	11.9	10.6	10.0	8.7	8.4	8.3	8.4	8.6	9.0	9.6	10.8	12.9
1983	11.9	10.5	9.9	8.7	8.3	8.2	8.3	8.5	9.0	9.5	10.7	12.8
1984	11.8	10.4	9.8	8.6	8.2	8.1	8.2	8.5	8.9	9.5	10.6	12.7
1985	11.7	10.4	9.8	8.5	8.2	8.1	8.2	8.4	8.8	9.4	10.6	12.7
1986	11.7	10.3	9.7	8.5	8.1	8.0	8.1	8.3	8.7	9.3	10.5	12.6
1987	11.6	10.2	9.6	8.4	8.0	7.9	8.0	8.3	8.7	9.3	10.4	12.5

1988	11.5	10.2	9.6	8.3	7.9	7.9	7.9	8.2	8.6	9.2	10.4	12.4
1989	11.5	10.1	9.5	8.3	7.9	7.8	7.9	8.1	8.5	9.1	10.3	12.4
1990	11.4	10.0	9.4	8.2	7.8	7.7	7.8	8.1	8.5	9.1	10.2	12.3
1991	11.3	9.9	9.4	8.1	7.7	7.7	7.7	8.0	8.4	9.0	10.2	12.2
1992	11.3	9.9	9.3	7.6	7.3	7.3	7.3	7.6	8.0	8.6	10.1	12.2
1993	11.2	9.8	9.2	7.5	7.3	7.2	7.3	7.5	7.9	8.5	10.0	12.1
1994	11.1	9.7	9.2	7.5	7.2	7.1	7.2	7.5	7.9	8.4	9.9	12.0
1995	11.0	9.7	9.1	7.4	7.1	7.1	7.1	7.4	7.8	8.4	9.9	12.0
1996+	11.0	9.6	9.0	6.8	6.5	6.4	6.5	6.8	7.2	7.8	9.8	11.9

San Joaquin
Air Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.8	11.1	9.9	9.3	8.9	8.8	8.9	9.2	9.6	10.2	11.3	12.7
1976	11.7	11.0	9.9	9.2	8.9	8.8	8.8	9.1	9.5	10.1	11.2	12.6
1977	11.7	10.9	9.8	9.1	8.8	8.7	8.8	9.0	9.4	10.0	11.1	12.6
1978	11.6	10.8	9.7	9.0	8.7	8.6	8.7	8.9	9.4	10.0	11.1	12.5
1979	11.5	10.8	9.7	9.0	8.7	8.5	8.6	8.9	9.3	9.9	11.0	12.4
1980	11.5	10.7	9.6	8.9	8.6	8.5	8.6	8.8	9.2	9.8	10.9	12.4
1981	11.4	10.6	9.5	8.8	8.5	8.3	8.4	8.7	9.1	9.7	10.9	12.9
1982	11.9	10.6	10.0	8.7	8.4	8.3	8.4	8.6	9.0	9.6	10.8	12.9
1983	11.9	10.5	9.9	8.7	8.3	8.2	8.3	8.5	9.0	9.5	10.7	12.8
1984	11.8	10.4	9.8	8.6	8.2	8.1	8.2	8.5	8.9	9.5	10.6	12.7
1985	11.7	10.4	9.8	8.5	8.2	8.1	8.2	8.4	8.8	9.4	10.6	12.7
1986	11.7	10.3	9.7	8.5	8.1	8.0	8.1	8.3	8.7	9.3	10.5	12.6
1987	11.6	10.2	9.6	8.4	8.0	7.9	8.0	8.3	8.7	9.3	10.4	12.5
1988	11.5	10.2	9.6	8.3	7.9	7.9	7.9	8.2	8.6	9.2	10.4	12.4
1989	11.5	10.1	9.5	8.3	7.9	7.8	7.9	8.1	8.5	9.1	10.3	12.4
1990	11.4	10.0	9.4	8.2	7.8	7.7	7.8	8.1	8.5	9.1	10.2	12.3
1991	11.3	9.9	9.4	8.1	7.7	7.7	7.7	8.0	8.4	9.0	10.2	12.2
1992	11.3	9.9	9.3	7.6	7.3	7.3	7.3	7.6	8.0	8.6	10.1	12.2
1993	11.2	9.8	9.2	7.5	7.3	7.2	7.3	7.5	7.9	8.5	10.0	12.1
1994	11.1	9.7	9.2	7.5	7.2	7.1	7.2	7.5	7.9	8.4	9.9	12.0
1995	11.0	9.7	9.1	7.4	7.1	7.1	7.1	7.4	7.8	8.4	9.9	12.0
1996+	11.0	9.6	9.0	6.8	6.5	6.4	6.5	6.8	7.2	7.8	9.8	11.9

Mountain Counties Air
Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.8	11.1	9.9	9.3	8.9	8.8	8.9	9.2	9.6	10.2	11.3	12.7
1976	11.7	11.0	9.9	9.2	8.9	8.8	8.8	9.1	9.5	10.1	11.2	12.6
1977	11.7	10.9	9.8	9.1	8.8	8.7	8.8	9.0	9.4	10.0	11.1	12.6
1978	11.6	10.8	9.7	9.0	8.7	8.6	8.7	8.9	9.4	10.0	11.1	12.5
1979	11.5	10.8	9.7	9.0	8.7	8.5	8.6	8.9	9.3	9.9	11.0	12.4
1980	11.5	10.7	9.6	8.9	8.6	8.5	8.6	8.8	9.2	9.8	10.9	12.4
1981	11.4	10.6	9.5	8.8	8.5	8.3	8.4	8.7	9.1	9.7	10.9	12.9
1982	11.9	10.6	10.0	8.7	8.4	8.3	8.4	8.6	9.0	9.6	10.8	12.9
1983	11.9	10.5	9.9	8.7	8.3	8.2	8.3	8.5	9.0	9.5	10.7	12.8
1984	11.8	10.4	9.8	8.6	8.2	8.1	8.2	8.5	8.9	9.5	10.6	12.7
1985	11.7	10.4	9.8	8.5	8.2	8.1	8.2	8.4	8.8	9.4	10.6	12.7
1986	11.7	10.3	9.7	8.5	8.1	8.0	8.1	8.3	8.7	9.3	10.5	12.6
1987	11.6	10.2	9.6	8.4	8.0	7.9	8.0	8.3	8.7	9.3	10.4	12.5
1988	11.5	10.2	9.6	8.3	7.9	7.9	7.9	8.2	8.6	9.2	10.4	12.4
1989	11.5	10.1	9.5	8.3	7.9	7.8	7.9	8.1	8.5	9.1	10.3	12.4
1990	11.4	10.0	9.4	8.2	7.8	7.7	7.8	8.1	8.5	9.1	10.2	12.3

1991	11.3	9.9	9.4	8.1	7.7	7.7	7.7	8.0	8.4	9.0	10.2	12.2
1992	11.3	9.9	9.3	7.6	7.3	7.3	7.3	7.6	8.0	8.6	10.1	12.2
1993	11.2	9.8	9.2	7.5	7.3	7.2	7.3	7.5	7.9	8.5	10.0	12.1
1994	11.1	9.7	9.2	7.5	7.2	7.1	7.2	7.5	7.9	8.4	9.9	12.0
1995	11.0	9.7	9.1	7.4	7.1	7.1	7.1	7.4	7.8	8.4	9.9	12.0
1996+	11.0	9.6	9.0	6.8	6.5	6.4	6.5	6.8	7.2	7.8	9.8	11.9

Lake Tahoe

Air Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.8	11.1	9.9	9.3	8.9	8.8	8.9	9.2	9.6	10.2	11.3	12.7
1976	11.7	11.0	9.9	9.2	8.9	8.8	8.8	9.1	9.5	10.1	11.2	12.6
1977	11.7	10.9	9.8	9.1	8.8	8.7	8.8	9.0	9.4	10.0	11.1	12.6
1978	11.6	10.8	9.7	9.0	8.7	8.6	8.7	8.9	9.4	10.0	11.1	12.5
1979	11.5	10.8	9.7	9.0	8.7	8.5	8.6	8.9	9.3	9.9	11.0	12.4
1980	11.5	10.7	9.6	8.9	8.6	8.5	8.6	8.8	9.2	9.8	10.9	12.4
1981	11.4	10.6	9.5	8.8	8.5	8.3	8.4	8.7	9.1	9.7	10.9	12.9
1982	11.9	10.6	10.0	8.7	8.4	8.3	8.4	8.6	9.0	9.6	10.8	12.9
1983	11.9	10.5	9.9	8.7	8.3	8.2	8.3	8.5	9.0	9.5	10.7	12.8
1984	11.8	10.4	9.8	8.6	8.2	8.1	8.2	8.5	8.9	9.5	10.6	12.7
1985	11.7	10.4	9.8	8.5	8.2	8.1	8.2	8.4	8.8	9.4	10.6	12.7
1986	11.7	10.3	9.7	8.5	8.1	8.0	8.1	8.3	8.7	9.3	10.5	12.6
1987	11.6	10.2	9.6	8.4	8.0	7.9	8.0	8.3	8.7	9.3	10.4	12.5
1988	11.5	10.2	9.6	8.3	7.9	7.9	7.9	8.2	8.6	9.2	10.4	12.4
1989	11.5	10.1	9.5	8.3	7.9	7.8	7.9	8.1	8.5	9.1	10.3	12.4
1990	11.4	10.0	9.4	8.2	7.8	7.7	7.8	8.1	8.5	9.1	10.2	12.3
1991	11.3	9.9	9.4	8.1	7.7	7.7	7.7	8.0	8.4	9.0	10.2	12.2
1992	11.3	9.9	9.3	7.6	7.3	7.3	7.3	7.6	8.0	8.6	10.1	12.2
1993	11.2	9.8	9.2	7.5	7.3	7.2	7.3	7.5	7.9	8.5	10.0	12.1
1994	11.1	9.7	9.2	7.5	7.2	7.1	7.2	7.5	7.9	8.4	9.9	12.0
1995	11.0	9.7	9.1	7.4	7.1	7.1	7.1	7.4	7.8	8.4	9.9	12.0
1996+	11.0	9.6	9.0	6.8	6.5	6.4	6.5	6.8	7.2	7.8	9.8	11.9

North Coast

Air Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.8	11.1	10.5	9.5	9.0	8.9	9.0	9.3	9.7	10.3	11.3	12.7
1976	11.7	11.0	10.4	9.5	8.9	8.9	8.9	9.2	9.6	10.2	11.2	12.6
1977	11.7	10.9	10.3	9.4	8.9	8.8	8.9	9.1	9.5	10.1	11.1	12.6
1978	11.6	10.8	10.3	9.3	8.8	8.7	8.8	9.0	9.5	10.0	11.1	12.5
1979	11.5	10.8	10.2	9.2	8.7	8.6	8.7	9.0	9.4	10.0	11.0	12.4
1980	11.5	10.7	10.1	9.2	8.7	8.6	8.7	8.9	9.3	9.9	10.9	12.4
1981	11.4	10.6	10.1	9.1	8.6	8.3	8.4	8.7	9.1	9.8	10.9	12.9
1982	11.9	10.6	10.0	8.7	8.4	8.3	8.4	8.6	9.0	9.7	10.8	12.9
1983	11.9	10.5	9.9	8.7	8.4	8.2	8.3	8.5	9.0	9.6	10.7	12.8
1984	11.8	10.4	9.8	8.6	8.3	8.1	8.2	8.5	8.9	9.6	10.6	12.7
1985	11.7	10.4	9.8	8.5	8.2	8.1	8.2	8.4	8.8	9.5	10.6	12.7
1986	11.7	10.3	9.7	8.5	8.1	8.0	8.1	8.3	8.7	9.4	10.5	12.6
1987	11.6	10.2	9.6	8.4	8.1	7.9	8.0	8.3	8.7	9.3	10.4	12.5
1988	11.5	10.2	9.6	8.3	8.0	7.9	7.9	8.2	8.6	9.3	10.4	12.4
1989	11.5	10.1	9.5	8.3	7.9	7.8	7.9	8.1	8.5	9.2	10.3	12.4
1990	11.4	10.0	9.4	8.2	7.9	7.7	7.8	8.1	8.5	9.1	10.2	12.3
1991	11.3	9.9	9.4	8.1	7.8	7.7	7.7	8.0	8.4	9.1	10.2	12.2
1992	11.3	9.9	9.3	8.0	7.3	7.3	7.3	7.6	8.0	9.0	10.1	12.2
1993	11.2	9.8	9.2	8.0	7.3	7.2	7.3	7.5	7.9	8.9	10.0	12.1

1994	11.1	9.7	9.2	7.9	7.2	7.1	7.2	7.5	7.9	8.9	9.9	12.0
1995	11.0	9.7	9.1	7.8	7.1	7.1	7.1	7.4	7.8	8.8	9.9	12.0
1996+	11.0	9.6	9.0	7.8	6.5	6.4	6.5	6.8	7.2	8.7	9.8	11.9

Lake County
Air Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.8	11.1	10.5	9.5	9.0	8.9	9.0	9.3	9.7	10.3	11.3	12.7
1976	11.7	11.0	10.4	9.5	8.9	8.9	8.9	9.2	9.6	10.2	11.2	12.6
1977	11.7	10.9	10.3	9.4	8.9	8.8	8.9	9.1	9.5	10.1	11.1	12.6
1978	11.6	10.8	10.3	9.3	8.8	8.7	8.8	9.0	9.5	10.0	11.1	12.5
1979	11.5	10.8	10.2	9.2	8.7	8.6	8.7	9.0	9.4	10.0	11.0	12.4
1980	11.5	10.7	10.1	9.2	8.7	8.6	8.7	8.9	9.3	9.9	10.9	12.4
1981	11.4	10.6	10.1	9.1	8.6	8.3	8.4	8.7	9.1	9.8	10.9	12.9
1982	11.9	10.6	10.0	8.7	8.4	8.3	8.4	8.6	9.0	9.7	10.8	12.9
1983	11.9	10.5	9.9	8.7	8.4	8.2	8.3	8.5	9.0	9.6	10.7	12.8
1984	11.8	10.4	9.8	8.6	8.3	8.1	8.2	8.5	8.9	9.6	10.6	12.7
1985	11.7	10.4	9.8	8.5	8.2	8.1	8.2	8.4	8.8	9.5	10.6	12.7
1986	11.7	10.3	9.7	8.5	8.1	8.0	8.1	8.3	8.7	9.4	10.5	12.6
1987	11.6	10.2	9.6	8.4	8.1	7.9	8.0	8.3	8.7	9.3	10.4	12.5
1988	11.5	10.2	9.6	8.3	8.0	7.9	7.9	8.2	8.6	9.3	10.4	12.4
1989	11.5	10.1	9.5	8.3	7.9	7.8	7.9	8.1	8.5	9.2	10.3	12.4
1990	11.4	10.0	9.4	8.2	7.9	7.7	7.8	8.1	8.5	9.1	10.2	12.3
1991	11.3	9.9	9.4	8.1	7.8	7.7	7.7	8.0	8.4	9.1	10.2	12.2
1992	11.3	9.9	9.3	8.0	7.3	7.3	7.3	7.6	8.0	9.0	10.1	12.2
1993	11.2	9.8	9.2	8.0	7.3	7.2	7.3	7.5	7.9	8.9	10.0	12.1
1994	11.1	9.7	9.2	7.9	7.2	7.1	7.2	7.5	7.9	8.9	9.9	12.0
1995	11.0	9.7	9.1	7.8	7.1	7.1	7.1	7.4	7.8	8.8	9.9	12.0
1996+	11.0	9.6	9.0	7.8	6.5	6.4	6.5	6.8	7.2	8.7	9.8	11.9

North East Plateau Air
Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975	11.8	11.1	9.9	9.3	8.9	8.8	8.9	9.2	9.6	10.2	11.3	12.7
1976	11.7	11.0	9.9	9.2	8.9	8.8	8.8	9.1	9.5	10.1	11.2	12.6
1977	11.7	10.9	9.8	9.1	8.8	8.7	8.8	9.0	9.4	10.0	11.1	12.6
1978	11.6	10.8	9.7	9.0	8.7	8.6	8.7	8.9	9.4	10.0	11.1	12.5
1979	11.5	10.8	9.7	9.0	8.7	8.5	8.6	8.9	9.3	9.9	11.0	12.4
1980	11.5	10.7	9.6	8.9	8.6	8.5	8.6	8.8	9.2	9.8	10.9	12.4
1981	11.4	10.6	9.5	8.8	8.5	8.3	8.4	8.7	9.1	9.8	10.9	12.9
1982	11.9	10.6	10.0	8.7	8.4	8.3	8.4	8.6	9.1	9.7	10.8	12.9
1983	11.9	10.5	9.9	8.7	8.4	8.2	8.3	8.5	9.0	9.6	10.7	12.8
1984	11.8	10.4	9.8	8.6	8.3	8.1	8.2	8.5	8.9	9.6	10.6	12.7
1985	11.7	10.4	9.8	8.5	8.2	8.1	8.2	8.4	8.8	9.5	10.6	12.7
1986	11.7	10.3	9.7	8.5	8.1	8.0	8.1	8.3	8.8	9.4	10.5	12.6
1987	11.6	10.2	9.6	8.4	8.1	7.9	8.0	8.3	8.7	9.3	10.4	12.5
1988	11.5	10.2	9.6	8.3	8.0	7.9	7.9	8.2	8.6	9.3	10.4	12.4
1989	11.5	10.1	9.5	8.3	7.9	7.8	7.9	8.1	8.6	9.2	10.3	12.4
1990	11.4	10.0	9.4	8.2	7.9	7.7	7.8	8.1	8.5	9.1	10.2	12.3
1991	11.3	9.9	9.4	8.1	7.8	7.7	7.7	8.0	8.4	9.1	10.2	12.2
1992	11.3	9.9	9.3	8.0	7.3	7.3	7.3	7.6	8.0	9.0	10.1	12.2
1993	11.2	9.8	9.2	8.0	7.3	7.2	7.3	7.5	7.9	8.9	10.0	12.1
1994	11.1	9.7	9.2	7.9	7.2	7.1	7.2	7.5	7.9	8.9	9.9	12.0
1995	11.0	9.7	9.1	7.8	7.1	7.1	7.1	7.4	7.8	8.8	9.9	12.0
1996+	11.0	9.6	9.0	7.8	6.5	6.4	6.5	6.8	7.2	8.7	9.8	11.9

North Central Coast Air
Basin

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Year	11.8	11.1	10.5	9.5	9.0	8.9	9.0	9.3	9.7	10.3	11.3	12.7
1975	11.8	11.1	10.5	9.5	9.0	8.9	9.0	9.3	9.7	10.3	11.3	12.7
1976	11.7	11.0	10.4	9.5	8.9	8.9	8.9	9.2	9.6	10.2	11.2	12.6
1977	11.7	10.9	10.3	9.4	8.9	8.8	8.9	9.1	9.5	10.1	11.1	12.6
1978	11.6	10.8	10.3	9.3	8.8	8.7	8.8	9.0	9.5	10.0	11.1	12.5
1979	11.5	10.8	10.2	9.2	8.7	8.6	8.7	9.0	9.4	10.0	11.0	12.4
1980	11.5	10.7	10.1	9.2	8.7	8.6	8.7	8.9	9.3	9.9	10.9	12.4
1981	11.4	10.6	10.1	9.1	8.6	8.3	8.4	8.7	9.1	9.7	10.9	12.9
1982	11.9	10.6	10.0	8.7	8.4	8.3	8.4	8.6	9.0	9.6	10.8	12.9
1983	11.9	10.5	9.9	8.7	8.4	8.2	8.3	8.5	9.0	9.5	10.7	12.8
1984	11.8	10.4	9.8	8.6	8.3	8.1	8.2	8.5	8.9	9.5	10.6	12.7
1985	11.7	10.4	9.8	8.5	8.2	8.1	8.2	8.4	8.8	9.4	10.6	12.7
1986	11.7	10.3	9.7	8.5	8.1	8.0	8.1	8.3	8.7	9.3	10.5	12.6
1987	11.6	10.2	9.6	8.4	8.1	7.9	8.0	8.3	8.7	9.3	10.4	12.5
1988	11.5	10.2	9.6	8.3	8.0	7.9	7.9	8.2	8.6	9.2	10.4	12.4
1989	11.5	10.1	9.5	8.3	7.9	7.8	7.9	8.1	8.5	9.1	10.3	12.4
1990	11.4	10.0	9.4	8.2	7.9	7.7	7.8	8.1	8.5	9.1	10.2	12.3
1991	11.3	9.9	9.4	8.1	7.8	7.7	7.7	8.0	8.4	9.0	10.2	12.2
1992	11.3	9.9	9.3	8.0	7.3	7.3	7.3	7.6	8.0	8.6	10.1	12.2
1993	11.2	9.8	9.2	8.0	7.3	7.2	7.3	7.5	7.9	8.5	10.0	12.1
1994	11.1	9.7	9.2	7.9	7.2	7.1	7.2	7.5	7.9	8.4	9.9	12.0
1995	11.0	9.7	9.1	7.8	7.1	7.1	7.1	7.4	7.8	8.4	9.9	12.0
1996+	11.0	9.6	9.0	7.8	6.5	6.4	6.5	6.8	7.2	7.8	9.8	11.9

